

# Work Order ID 53763

November 17, 2009 8:54:18 AM

Page 1

Item ID: D350-591-311

Accept

Revision ID: B

Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09 Start Qty: 10.00

Required Date: 12/11/09 Req'd Qty: 10.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: *RL*

Date: *09-11-17*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3272

Rev B

100

0.00



DC

Document Control

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

*S10606*

*HJ for BG 10/01/05*

110

0.00



Large Fab

Large Fab

Large Fab

Memo

0.00

1-Bevel end for welding FWD ONLY *lh*

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg *h*

D3272

A/R ☐ Aluminum Rod *1111311*

3-Grind End Plate flush *1111494*

*lh*

*1109.12.18*

*10*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 53763

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Item ID: D350-591-311

Accept



Setup Start



Revision ID: B

Item Name: Heli-Access-Step, Long LH

Stop



Start Date: 11/30/09 Start Qty: 10.00



Cust Item ID:

Required Date: 12/11/09 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
QC	Memo	0.00							
Quality Control									
130	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish	Memo	0.00							
Hand Finishing									

09/12/18 (10)

275 09/12/18

10  
4H

PE 09.12.22  
300

10

09/12/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

# Work Order ID 53763

November 17, 2009 8:54:24 AM

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Item ID: D350-591-311

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Setup Start

Revision ID: B

Stop

Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09 Start Qty: 10.00

Cust Item ID:

Required Date: 12/11/09 Req'd Qty: 10.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

W

09.12.22

180

Large Fab

0.00

Large Fab

Memo

0.00

Large Fab

1-Assemble Leg Assembly as per Dwg D3272.

2-Leave one rivet out until welding is complete.

3-Bevel Aft end for welding

4-Inspect for foreign object as per QSI 024

5-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod MILL 311

6-Grind End Plate flush

7-Install last rivet as per Dwg.

09.12.23

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

# Work Order ID 53763

November 17, 2009 8:54:24 AM

Page 4

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QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

190  
QC  
Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

0.00

Memo

0.00

10

B.E. 12-23

200  
QC  
Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

10

12-23

210  
HandFinish  
Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

=> 10/10/10

10

12-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 53763

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Page 5

Item ID: D350-591-311

Accept

Setup Start

Revision ID: B

Stop

Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09 Start Qty: 10.00

Cust Item ID:

Required Date: 12/11/09 Req'd Qty: 10.00

Customer:

Reference:

Run Start

Approvals: Process Plan: Date: Tooling: Date:

Stop

QC: Date: SPC (Y/N): Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

220

White Gloss(\*pressure wash) per QSI005 4.3-Alum

0.00



Powdercoat

Powder Coating

Memo

START TIME: 10:15AM  
OVEN TEMPERATURE: 320°F  
FINISH TIME: 10:45AM

0.00

⇒ M 10/01/04

X 10WH

230

Wing Walk as per dwg QSI005 4.4 Batch 112900

0.00



HandFinish

Hand Finishing

Memo

0.00

BR 10-01-4

10LH

240

QC3- Inspect Part Finish

0.00



QC

Quality Control

Memo

0.00

⇒ S. 10/01/06

410LH

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 53763

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Item ID: D350-591-311

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Setup Start



Revision ID: B

Item Name: Heli-Access-Step, Long LH

Stop



Start Date: 11/30/09 Start Qty: 10.00



Cust Item ID:

Required Date: 12/11/09 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

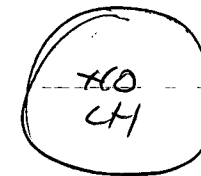
Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	Pick Kit	0.00							
Packaging	Memo	0.00							
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
QC	Memo	0.00							
Quality Control									
270	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-591-311								
	Location: <i>New D</i>								

10-1-6

S



*P 10/01/07 10*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 53763

November 17, 2009 8:54:35 AM



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Item ID: D350-591-311

Accept



Setup Start



Revision ID: B

Item Name: Heli-Access-Step, Long LH

Stop



Start Date: 11/30/09 Start Qty: 10.00



Cust Item ID:

Required Date: 12/11/09 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

280

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/01/09  
MF 10-01-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November 17, 2009 8:53:56 AM

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Work Order ID: 53763



Parent Item: D350-591-311RevB



Parent Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09

Required Date: 12/11/09

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3065-041RevB		Manufactured	No				Each	72.0000	10.0000			
Step Leg Assembly Hi												

11/29/09 12:22

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

32

53523

32

10

Main Warehouse

WA

40

52104

40

D3066-1RevB

Manufactured

No



Spacer

Each

101.0000

20.0000



11/29/09 12:22

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

101

51545

14

52662

87

14

6

D3219-1RevA

Manufactured

No



Plate

Each

68.0000

20.0000



11/29/09 12:15

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

68

52230

68

12

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

November 17, 2009 8:53:56 AM

Work Order ID: 53763

Parent Item: D350-591-311RevB

Parent Item Name: Heli-Access-Step, Long LH


Comments:

Start Date: 11/30/09

Required Date: 12/11/09

Start Qty: 10.00


Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3067-1RevA  End Plate		Manufactured	No			110	Each	97.0000	10.0000			


*12-09-12-16*

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	97	
51546	8	
<u>53451</u>	89	

*10*

D3272-1RevB 		Manufactured	No			110	Each	0.0000	10.0000			
--	--	--------------	----	--	--	-----	------	--------	---------	--	--	--

*12-09-11-18 353762*

Step MS210421.51 <i>12</i>  Nut		Purchased	No			110	Each	926.0000	20.0000			
---	--	-----------	----	--	--	-----	------	----------	---------	--	--	--

*840*

*10-1-5 (100) SD*

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	926	
110382	10	
111127	4	
111636	15	
<u>112314</u>	897	

*20*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November 17, 2009 8:53:56 AM

Work Order ID: 53763



Parent Item: D350-591-311RevB



Parent Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09

Required Date: 12/11/09

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

MS20600-AD4W4

Purchased

No

180

Each

2,015.000

160.0000



Rivets

*11/29.12.22*

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

2015

110731

215

111359

46

111477

74

112314

1656

112385

24

*160*

AN3-35A

Purchased

No

260

Each

421.0000

20.0000



*S* 410 Bolt

*10-1-5* *sl* *10*

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

421

106993

12

110467

1

112314

408

*80*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 4

Work Order ID: 53763

Parent Item: D350-591-311RevB

Parent Item Name: Heli-Access-Step, Long LH

Comments:

Start Date: 11/30/09

Required Date: 12/11/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN4-13A	1x8	Purchased	No			260	Each	299.0000	80.0000			

S410 Bolt



m113359 10-1-5 sub 10x

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	299	
107321	1	
107534	5	
107959	23	
109285	37	
110552	66	
110865	3	
111477	9	
111925	7	
112314	48	
113149	100	
17406	0	
51764	0	

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Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

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Work Order ID: 53763

Parent Item: D350-591-311RevB

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09

Required Date: 12/11/09

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN5-36A <i>x2</i> Bolt		Purchased	No			260	Each	351.0000	20.0000			

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	351
109545	11
110467	7
110731	4
112243	20
112314	259
112385	50

*10-1-5 sf*

AN960JD10 *x4*

Washer

Purchased

No

260

Each

2,498.000 40.0000

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST	2498
105442	19
109059	2
109840	23
110985	202
111279	5
111668	64
112314	965
112369	218
113149	1000

*16-1-5 sf (10)*

November 17, 2009 8:53:58 AM

Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

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November 17, 2009 8:53:59 AM

Work Order ID: 53763



Parent Item: D350-591-311RevB



Parent Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09

Required Date: 12/11/09

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD416		Purchased	No			260	Each	3,603.000	160.0000			



Washer



M 113288

10-1-5

sl 10

40 ~~WASHER D04632~~ 113288 D04632

113288 D04632

Per QS 2017

OK

8/10/06

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

3603

108161

329

110523

340

111279

101

111916

482

112314

2351

16941

0

November 17, 2009 8:53:59 AM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November 17, 2009 8:53:59 AM

Page 7

Work Order ID: 53763

Parent Item: D350-591-311RevB

Parent Item Name: Heli-Access-Step, Long LH

Comments:

Start Date: 11/30/09

Required Date: 12/11/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD516 Washer		Purchased	No			260	Each	1,692.000	40.0000			

## Warehouse Location

## Loc Qty

## Loc Code

Main Warehouse

ST

1692

100564

2

106167

6

107534

34

107959

43

108246

46

108672

2

109059

49

109752

22

110363

46

110523

57

111279

39

112082

64

112314

282

112828

500

113149

500

10-1-3

10 SP

40

November 17, 2009 8:53:59 AM

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November 17, 2009 8:54:07 AM

Work Order ID: 53763

Parent Item: D350-591-311RevB

Parent Item Name: Heli-Access-Step, Long LH

Comments:

Start Date: 11/30/09

Required Date: 12/11/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2230-3RevG

Manufactured

No

260

Each

169.0000

40.0000



Lug

BS3781 10-1-5 5/100

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

3

51568

3

Main Warehouse

ST176

166

51428

166

D2618RevB1

Manufactured

No

260

Each

251.0000

20.0000



Bushing

10-1-3 100

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST39

251

50989

200

51189

51

20

November 17, 2009 8:54:07 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November 17, 2009 8:54:07 AM

Work Order ID: 53763

Parent Item: D350-591-311RevB

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09

Required Date: 12/11/09

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2856-400RevA Abrasion Strip	1x2@7.2"	Manufactured	No			260	f	360.0237	6.0000			

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST403

360.0236842

50593

144.023684

52563

216

D3067-1RevA

Manufactured

No

260

Each

97.0000

10.0000



End Plate

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST 353784

97

51546

8

53451

89

D3235-1RevA

Manufactured

No

260

Each

93.0000

20.0000



Mounting Lug

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST

93

45398

4

47969

89

November 17, 2009 8:54:07 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

November 17, 2009 8:54:12 AM

Work Order ID: 53763



Parent Item: D350-591-311RevB



Parent Item Name: Heli-Access-Step, Long LH

Start Date: 11/30/09

Required Date: 12/11/09

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
S410 D3278-041RevC Support Assembly	11	Manufactured	No			260	Each	73.0000	10.0000			
											10-1-5	sl (16x)

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

73

52075

73

10

S410 MS21042L3 1x2

Purchased

No

260

Each

3,038.000

20.0000

10-1-5

sl (12x)

Nut

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

3038

110844

32

111274

27

111668

487

112314

1992

112385

500

20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Page 11

November 17, 2009 8:54:13 AM

Work Order ID: 53763

Parent Item: D350-591-311RevB

Parent Item Name: Heli-Access-Step, Long LH

Comments:

Start Date: 11/30/09

Required Date: 12/11/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21042L4 Nut		Purchased	No			260	Each	5,129.000	80.0000			

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	5129	
110507	184	
111827	4938	
112314	7	
15924	0	

November 17, 2009 8:54:13 AM

Shop Packet Print

Page 11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN <i>GP</i>	DRAWN BY <i>B</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>H</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

**RELEASED***07.06.04 H***B**

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

**GENERAL NOTES:**

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO ADMINISTRATION  
WITHOUT NOTICE  
WORK ORDER  
NO. *5-3763*  
*13109-11-17*

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**DART**

DESIGN	90	DRAWN BY	JR	DART AEROSPACE LTD
CHECKED	CE	APPROVED	MR	HAWKESBURY, ONTARIO, CANADA
DATE	07.05.18	TITLE	STEP ASSEMBLY, HI LONG	REV. B
		DRAWING NO.	D3272	SHEET 2 OF 3
		SCALE	1:20	

DETAIL A

D.O.I

116.25  
(CUT LENGTH OF D3272-1, REF)

108.93  
(DIST FROM FIRST HOLE TO FWD FACE OF SUPPORT)

DETAIL B

1 D3219-1  
SUPPORT  
(2 PLACES)

D3272-1 STEP B

**D3272-041 STEP ASSEMBLY (LH. SHOWN)**  
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)

SHOWN  
REMOVED  
EXCEPT  
UNCONTROLLED  
SUBJECT TO  
WITH  
WORK  
NO. 52263

APPLY BLACK ANTI-SKID  
ON TOP SURFACE TO  
BOTTOM OF TOP RADIUS

RIVET D3065-041  
TO D3272-1 USING  
MS20600AD4W4 RIVET  
(16 PLACES)

1.36  
(REF)

0.65  
(REF)

GRIND FLUSH  
(TYP)

3.375

(TYP)

D3219-1  
SUPPORT  
(REF)

D3067-1 END PLATE  
(2 PLACES)

D3066-1 SPACER  
(2 PLACES)

D3065-041  
LEG ASSEMBLY

**DETAIL B**  
(SCALE 1:5)

**DETAIL A**  
(SCALE 1:5)

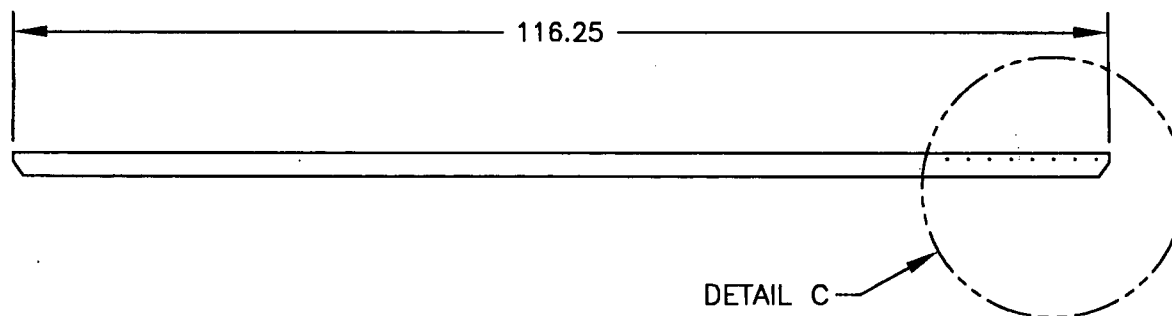
RELEASED  
07.04.18

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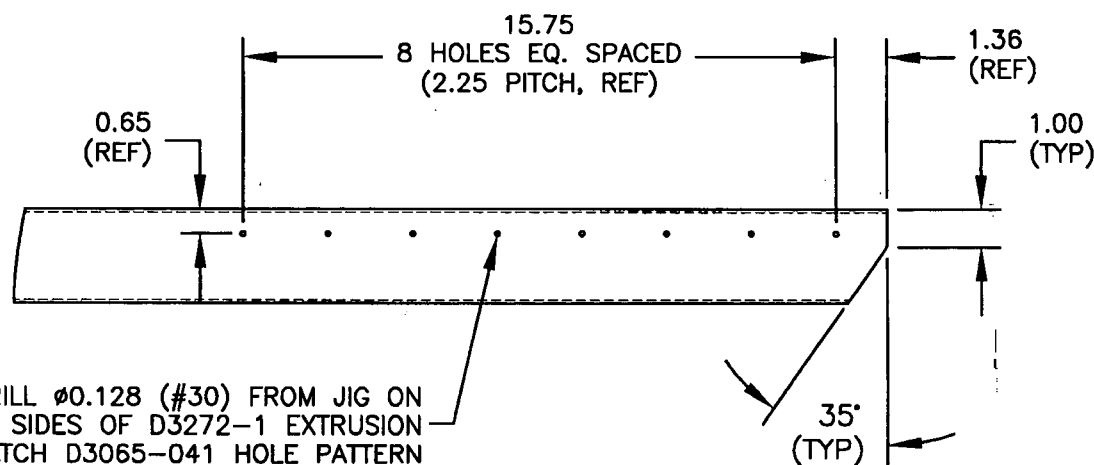
**DART**

DESIGN	90	DRAWN BY	JB	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA
CHECKED	CE	APPROVED	JB	REV. B
DATE	07.05.18	TITLE	STEP ASSEMBLY, HI LONG	SHEET 3 OF 3
		SCALE	1:20	



**△ B D3272-1 STEP**  
(MAKE FROM D2622-120 STEP EXTRUSION)

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RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 53743



DRILL  $\phi 0.128$  (#30) FROM JIG ON  
BOTH SIDES OF D3272-1 EXTRUSION  
TO MATCH D3065-041 HOLE PATTERN

**DETAIL C**  
(SCALE 1:5)

RELEASED  
07.06.04

# REFERENCE ONLY

DART AEROSPACE LTD.

D350-591  
Page 23 of 23

Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	Heli-Access-Step™, Long Step – High Skid, LH
	X							D350-591-212	Heli-Access-Step™, Long Step – High Skid, RH
		X						D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
			X					D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
				X				D350-591-215	Heli-Access-Step™, Short Step – Low Skid, LH
					X			D350-591-216	Heli-Access-Step™, Short Step – Low Skid, RH
						X		D350-591-311	Heli-Access-Step™, Long Step – High Skid, LH
							X	D350-591-312	Heli-Access-Step™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8							D2274	RADIUS BLOCK
						2	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

\*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.

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Revision: G  
Date: 08.10.06